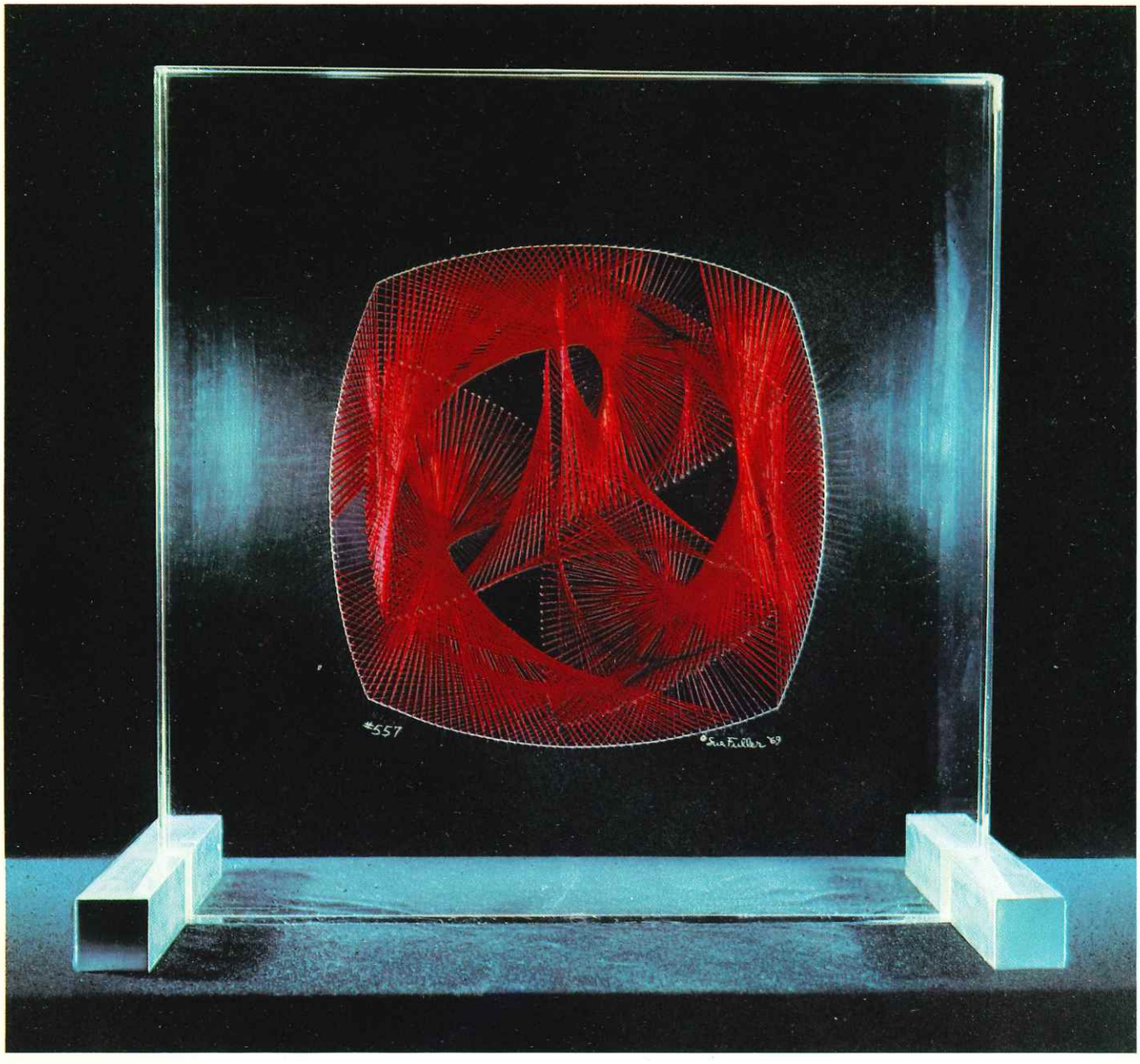
THE LUCITE® spectrum

VOLUME 7 • NUMBER 2 • 1969



Webs of light

"It was in 1950 that I saw my first Sue Fuller string composition. I was intrigued by its design, its complexity and its apparent simplicity, and by the superb craftsmanship that had been employed in its making." Stated Henry B. Caldwell, Director of the Norfolk Museum of Arts and Sciences in the foreword to the catalog of Miss Fuller's "one-man" exhibition in 1967, " . . . What I had not seen were her plastic embedments which are all of recent execution. These three-dimensional cubes with their web-like construction floating in space are a sheer joy to look upon. An infinite variety of effects can be obtained by allowing sunlight to strike the polished translucent cube or by placing it over a light-box."

It would be difficult to elaborate on Mr. Caldwell's statement. The string compositions of Sue Fuller, represented here by one of her more recent works of colored filaments are patterns of light. Whether they are paintings or sculpture is a moot question. "If you must place either one label or the other on a work of art," says Miss Fuller, "you've got a roadblock."

Miss Fuller's most recent works are embedded in LUCITE acrylic monomer providing protection in handling and permitting display methods previously limited by the supporting medium.

Sue Fuller's art embedded in LUCITE® is in the permanent collections of the finest museums in this country and abroad—the Metropolitan Museum, Whitney Museum of American Art, National Collection of Fine Arts (Smithsonian Institution), Tate Gallery, London, and a host of others.

Their interest, however, is not confined to museums but has broad appeal as illustrated recently when her exhibition at the Bertha Shaefer Gallery in New York was featured on NBC-TV's "Today" show.

Miss Fuller has her compositions embedded in LUCITE acrylic plastic by Clearfloat, Inc., Attleboro, Mass.

Rather than adding to the compositions, the crystal clarity of LUCITE permits Miss Fuller to delete a supporting frame permitting the compositions to be displayed in the simplicity they deserve.

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The purpose of THE LUCITE® SPECTRUM is to provide useful information on building construction products made with Du Pont LUCITE® acrylic plastic materials. This publication will be a medium through which ideas about these materials may be exchanged. Your comments and suggestions are invited. If you desire further information on any product mentioned in this issue, please write to: The Editor, THE LUCITE® SPECTRUM, Du Pont Company, 2420 Nemours Building, Wilmington, Delaware 19898.

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EDITOR: R. F. WELSH, JR. • ART DIRECTION: R. L. DOWNES, J. C. PARRY • PRODUCTION SUPERVISOR: J. C. RECORDS

LECTURE HALL LIGHTING

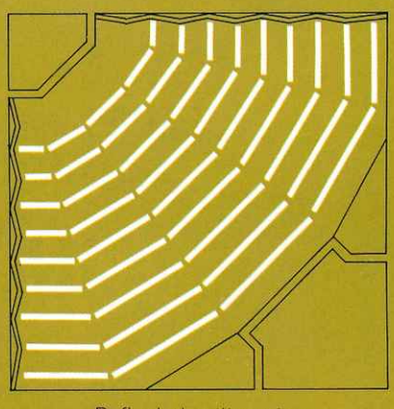
A new wing has recently been added to an existing building of the Albany Law School. The two main lecture halls contained in this new wing utilize a unique lighting system designed jointly by the architect, Robert Trudeau, and the electrical engineer, Walter Stewman.

Both lecture halls seat the students at rows of built-in tables (arranged to form chords of 90° concentric arcs) to center on the lecturer's dais, located at the apex corner of the hall. The sculptured ceiling contour complements the amphitheater floor contour by providing a ceiling height of 8′-6″ at rear, to 18′-0″ directly over the speaker's podium, in front. Both floor and ceiling contours were arranged to form matching chords of 90° concentric arcs.

The lighting system designed to blend in perfectly with the architectural structure of the hall, required accurately measured locations, and carefully installed lighting components. This required very close cooperation.

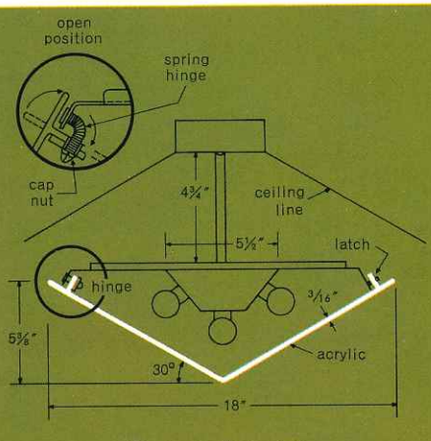
The great variation in fixture row length, and in ceiling height required that special consideration be given to the design of the 3 lamp luminaire and to the 18″ wide "V" shaped diffusers. Two levels of illumination are provided by the 3 lamp luminaire. Good lamp-hiding characteristics and even light transmission are provided by the translucent white diffusers. The luminaires, custom made by Lightron of Cornwall, Inc., utilize special diffusers extruded from Du Pont LUCITE® acrylic resin by Custom Extrusion.

CREDITS: Architect: Robert Louis Trudeau, Latham, New York • Electrical Engineer: Walter S. Stewman, Albany, New York • General Contractor: Panzeri and Henderson, Albany, New York • Electrical Contractor: Rauche and Morrell, Inc., Albany, New York • Fixture Manufacturer: Lightron of Cornwall, Inc., Cornwall-on-Hudson, New York. Lenses extruded from Du Pont LUCITE acrylic resin by Custom Extrusion, Inc., Sheffield, Mass.



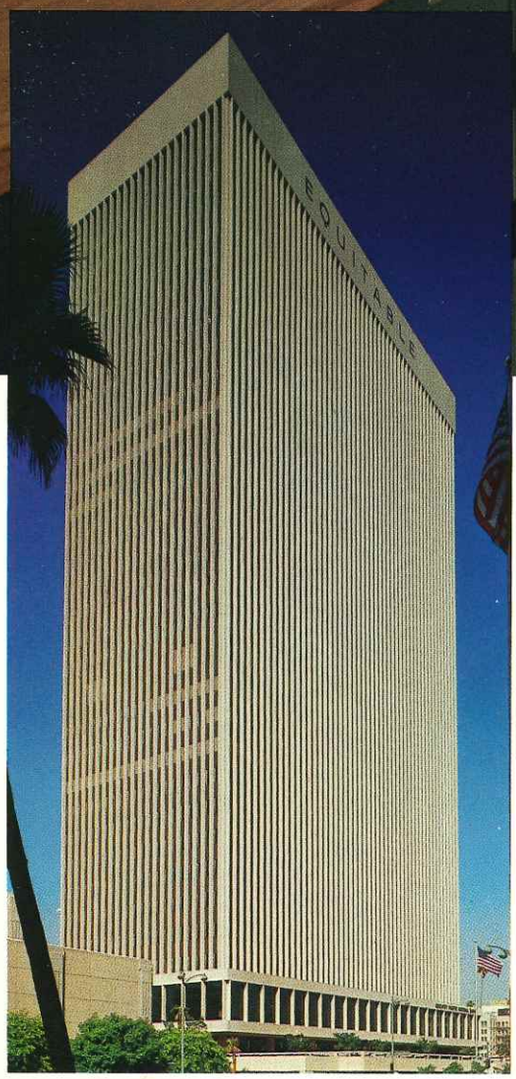
Reflected ceiling plan

Fixtures are located on approximations of concentric circles with the speaker's dais as the center. Fixtures for each row vary in length and were custom made by Lightron of Cornwall.



Cross section view

Triangular wrap around diffusers of LUCITE® extruded by Custom Extrusion for Lightron of Cornwall 3-lamp fixtures. Single inner row of lamps is on separate ballast from 2 outer lamps. One, two or three lamps per fixture may be lighted at one time.



(Left) "The Equitable Building combines strength, direction, dimension and solidity with an inviting warmth and exacting grace," says MacDonald Becket, AIA, president of the architectural firm.

On the three floors occupied by Equitable, the lighting fixtures provide approximately 110 footcandles of illumination at desk level.

Equitable's Light Assurance

Specially developed lighting-air-conditioning fixtures in which the lenses of LUCITE® appear to float in the ceiling provide high-intensity, glare-free light in the new Equitable Building, the tallest building on Los Angeles' Wilshire Blvd.

Designed by Welton Becket and Associates, architects and engineers, the 34-story rectangular tower of beige textured concrete and bronze glass reaches 454 feet into the air above a two-acre, two-level plaza between Alexandria and Mariposa Avenues.

The dimensions of the building are 103 feet deep by 233 feet wide. Costing approximately $30 million, the building has 780,000 gross square feet including parking space for more than 1,200 automobiles on three levels beneath the plaza. 50,000 square feet on three floors will be used as the Southern California headquarters for the Equitable Life Assurance Society of America and the balance is available for leasing.

Turner Construction Company was general contractor and Fischbach and Moore, Inc., was the electrical contractor. The mechanical subcontractor was Scott Co. of California.

The structure is set back 75 feet from a new sidewalk along Wilshire Blvd. The office tower was designed so that it occupies only 12% of the total site and 24% of the plaza, in effect placing the building in the midst of a park.

Floors have been designed for complete flexibility of office arrangement. All floors have central elevator and

service cores, suspended acoustical ceiling with integrated and recessed combination lighting-air-conditioning fixtures, and underfloor power and communication lines, thus permitting any type of office or suite arrangement to be achieved with moveable partitions.

The light-air-conditioning fixtures were specially developed by Westinghouse Interior Lighting Division for Welton Becket and Associates' mechanical and electrical engineering department to provide high-intensity, glare-free light. The appearance of the fixture is fully luminous from ceiling tile to ceiling tile.

The architects selected a prismatic pattern for the lens and specified 100% acrylic plastic because of its resistance to breaking and its relative lightness.

The Lighting Division of Westinghouse Electric Corporation manufactured the fixtures in Vicksburg, Mississippi.

The custom designed frameless lenses, made of Du Pont LUCITE acrylic resin, were manufactured by Plaskolite, Inc., of Columbus, Ohio, using their PL-21 prismatic pattern.

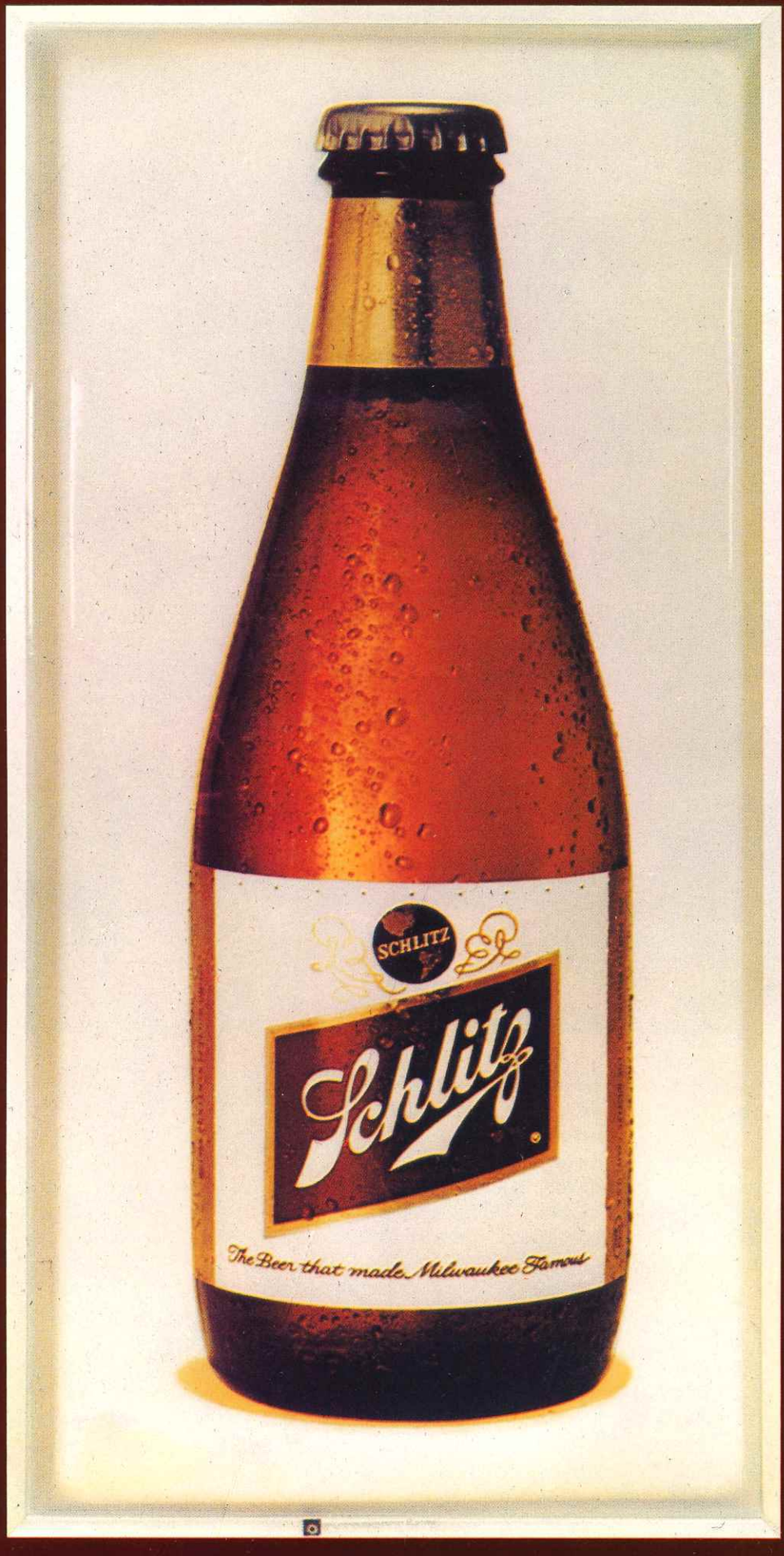
The frameless, 3-lamp troffers employ Sylvania rapid-start, 430 ma. fluorescent lamps. The lenses are hinged for opening from either side to facilitate maintenance.

Fourteen inches wide by fifty-four inches long, the fixtures utilize the heat-of-light principle in which the air supply comes in through vents on the sides of the lighting fixture while return air is vented through slots at the ends of the fixture to minimize the amount of heat which enters the office space from each lighting fixture. The frameless fixture, with vents on four sides, causes the lens to appear to float in the ceiling.

On the three floors occupied by Equitable, the lighting fixtures provide approximately 110 footcandles of illumination at desk level. The mounting and switching locations of the lighting fixtures on each floor are customized according to the wishes of the tenant.

CREDITS: Equitable Building, 3435 Wilshire Blvd., Los Angeles, California • Architect: Welton Becket and Associates, Los Angeles, California; Project Architect: George S. Hammond, AIA; Assistant Director of Engineering: G. Bradley Karr • General Contractor: Turner Construction Company, Los Angeles, California; Project Manager: E. L. Peters • Electrical Contractor: Fischbach and Moore, Inc., Los Angeles, California; Electrical Engineer: Richard N. Polis • Fixture Manufacturer: Westinghouse Electric Co., Lighting Division, Vicksburg, Mississippi

Lenses extruded from Du Pont LUCITE by Plaskolite, Inc., Columbus, Ohio


SCHLITZ
Schlitz
The Beer that made Milwaukee Famous

a tall frosty sign of beer

Schlitz new dealer signs show a tall frosty bottle of beer that looks so real you're tempted to try to wipe the sweat off it.

When Jos. Schlitz Brewing Co. started issuing these new identification signs this fall they were making a major change in their signs which at first may not have been obvious.

Their new sign has the full color photographic reproduction right on the sign face which is SWEDCAST® 300 acrylic sheet cast continuously from LUCITE® acrylic monomer.

One of the reasons that the change is not obvious is that there have been internally illuminated signs with four-color reproduction before. But these have almost always been a decalcomania which is adhered to the front surface of the sign. These decals were exposed directly to the weather.

The new Schlitz signs are silk screened on the second surface, you look *through* the sheet of LUCITE at the reproduction, so that only the smooth, weather resistant surface of the acrylic sheet is exposed to the weather and the hard glossy surface can be washed clean by the rain.

Everbrite Sign Company of South Milwaukee, manufacturers of the signs is pleased with this change. "It lets us give the customer a better sign," states Vice President, Gil Jacobs. "The face is all one piece, acrylic sheet silk screened with acrylic paints, then thermoformed. There's no film or adhesive . . . no way for it to peel."

The face is made from SWEDCAST 300 produced by Swedlow Inc., Garden Grove, Calif. and Florence, Ky. This acrylic sheet, made from LUCITE acrylic monomer by a continuous casting process, is well suited to the manufacture of this sign. Although available in continuous rolls, Everbrite buys the material cut to size for this use, and the accurately cut sheets and particularly uniform caliper permit the application of four silk screen colors plus an overall white and the subsequent thermoforming operation all in perfect registration.

Everbrite, top production sign manufacturer, is pleased with the performance of the Swedcast sheet, and with the quality of reproduction achieved in the silk screening process. "I would expect greater use of full color photos in outdoor signs," says Jacobs, "and a strong preference for direct silk screening. It makes a better sign."

Six-foot tall by three-foot wide Schlitz taproom sign is silk-screened in four colors by Everbrite Sign Company.

AURRERA TAXQUEÑA

Architectural designers know that local conditions must be considered carefully in the planning of any project. Thus, in Mexico City, where clear weather prevails most of the time and electricity is quite expensive, skylights of clear acrylic sheet cast from Du Pont acrylic are important features in the design of the new Aurrera Taxqueña shopping center.

Aurrera Taxqueña is a complete shopping center, the main store of which measures 450 by about 200 feet. This is the building in which the largest amount of sheet made from Du Pont acrylic is used. The store sells food and general merchandise and includes a snack bar, a shoe store and a liquor department. A VIP's restaurant, separate from the snack bar inside, forms part of the complex.

Sidney H. Morris & Associates, Chicago, who designed the Aurrera skylights and the overall lighting design, made a careful analysis of the conditions in Mexico City in order to achieve a maximum of natural light without glare. A study of this analysis made possible the balance between the skylighting and the necessary complement of artificial lighting. In harmony with the overall design of the shopping center, Morris & Associates designed a skylight system which runs from the front to the rear of the sales area with hidden cove lights running the length of the skylights. These fluorescent lights are used to balance the natural light and to provide light on dull days or evening hours.

The skylights are set on built-up curbs to allow for Mexico City's sometimes heavy rains. Deep baffles introduced within and across the skylight wells at intervals are designed to provide relief from sky glare.

Another important consideration in Mexico is the availability and quality of materials. Considering these two important factors, both Morris & Associates and Ben Mayer, head of Ben Mayer Design, Inc., West Los Angeles, who created all interiors and graphics for Aurrera, were specific in choosing acrylic materials of Du Pont acrylic by Plastiquimica, S.A., of Mexico City.

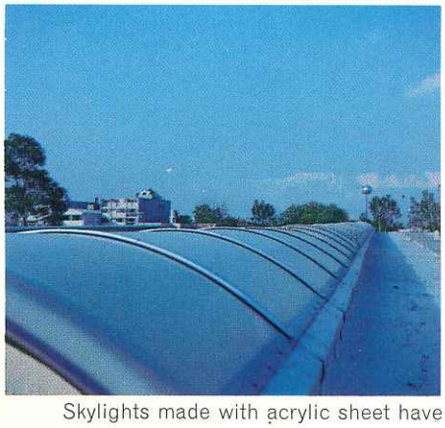
Ben Mayer N.S.I.D. used Plastiquimica's VITREX® sheet made from Du Pont acrylic in many ways on the Mexico City project. One major use was in the fascia, which consist of panels ten feet in height by five feet in width, surrounding a major part of the building. The fascia are vacuum-formed modular panels. These design elements match and repeat, to give a continuous pattern of the Aurrera logo.

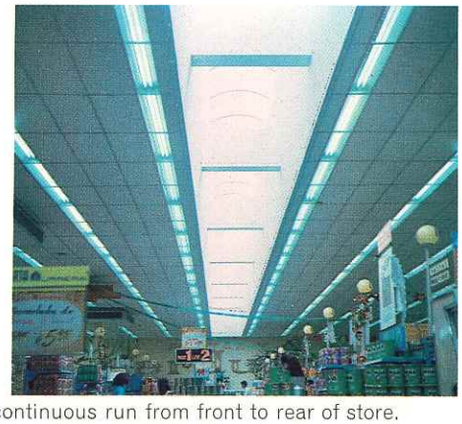
Mayer considers the Aurrera Taxqueña shopping center one of the most strikingly beautiful of the chain of Aurrera stores throughout Mexico with a unified and uncluttered design.

Acrylic sheet cast from Du Pont acrylic by Plastiquimica was chosen for both skylights and fascia panels because of its resistance to yellowing and loss of physical properties in the brilliant sunlight of Mexico City.

CREDITS: Aurrera Taxqueña is owned and operated by MIDCO S.A., Mexico DF • Architectural Design by Sidney H. Morris & Associates, Chicago, Ill. • Interior and Graphic Design by Ben Mayer Design, Inc., Los Angeles, California.

VITREX® acrylic sheet cast from Du Pont acrylic by Plastiquimica, S.A., Mexico DF.





Skylights made with acrylic sheet have continuous run from front to rear of store.

Panels 10 feet high and 5 feet wide cast from Du Pont acrylic and thermoformed to represent the stylized, Aurrera "A" are used for the fascia of the building, and also as the sign background.

ERA
COLATE" AURRERA
MILES DE REGALOS PARA UD.!

COVER: A fisheye lens distorts the lines of the new Equitable Building in Los Angeles. For a truer picture see page 6 "Equitable's Light Assurance."

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